**Introduction to Electrical & Computer Engineering Syllabus**

**Department of Electrical & Computer Engineering and Computer Science**

**Course Number and Title:** ECE101

**Semester and Year:** Spring 2024

**Instructor:** Mr. Andrew Overton

**Classroom and Hours:** ENB 200; 4:00PM - 4:50PM Monday and Wednesday

**Office Location**: ENB 237

**Office Hours:** 12:00-2:00PM on M, T, and W or by Appointment

**E-Mail:** andrew.j.overton@jsums.edu

**Telephone:** (601)672-7437

**Required Text(s):**

Instructor Notes

**Course Description (should be the one used in the JSU catalog)**

ECE 101 312 (2) Introduction to Electrical & Computer Engineering. This course gives first year students a survey of the fields of electrical and computer engineering. Topics include the different subareas within the electrical and computer engineering field, professional careers for ECE students and the tools that will be utilized throughout the curriculum. The course discusses the curriculum, the available technical electives, basic concepts that will be used in the course of study, and a brief history of computing from the abacus to supercomputers, and professional careers for ECE students.

**Course Objectives (must be measurable student outcomes)**

Each student who successfully completely this course should be able to:

CO1: Describe different occupations in the fields of electrical and computer engineering.

CO2: Describe what electricity is.

CO3: Describe basic electronic components.

CO4: Describe simple digital logic functions.

CO5: Explain the history of computing machines.

CO6: Describe how a computer is programmed.

**Course Content and Assignment Schedule**

Program Description and Introduction to Electricity – 4 Sessions

Basic Electronic Components – 7 Sessions

Basic Digital Logic Functions – 5 Sessions

Number Systems – 3 Sessions

Fundamentals of computer organization – 8 Sessions

Introduction to Computers – 6 Sessions

Exams – 4 Sessions

**Instructional Strategies**

Students are expected to participate in class discussions. Questions are encouraged.

Homework assignments are to be completed by individual students. Working together is acceptable, but each student needs to turn in their own work. Copying will not be accepted.

Two tests, a midterm and final exam will be given at even intervals throughout the semester. Using references, including the internet, is acceptable. Time will not be available to use the internet to answer all questions on tests and quizzes.

**Student Activities**

**Homework and Programming Projects:** Students will be given quizzes or tests at the end of each major topic.

* Students should submit their homework before start class and should be typed.

**Online Quizzes and Pop Quizzes:** Students will be given quizzes in the classroom and through Canvas. It should be done within a term or at the place that the instructor requested.

**Exams (Test 1, Test 2, Midterm and Final Exam):** There will be four exams during the semester (the two tests, a Midterm and the Final Exam). The exams will cover the topics discussed throughout the semester and will be given during the scheduled exam times.

**Method of Student Evaluation**

Grading Policy:

* Attendance 10%
* Quizzes and Homework 15%
* Term Paper 10%
* In Class Tests 20%
* Midterm Exam 20%
* Final Exam 25%
* Total 100%

**Grading Scale**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Range** | **90% - 100%** | **80% - 89%** | **70% - 79%** | **60% - 69%** | **below 60%** |
| **Letter** | **A** | **B** | **C** | **D** | **F** |

**Method of Course Evaluation**

* SIRS
* Evaluation by students on their ability to perform in each of the course outcomes during the semester using Tests , Homework and Quizzes (ABET).

**Special Needs Learners**

(If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact both your instructor and the Office of the Americans with Disabilities Act (ADA) Coordinator and Compliance Office, P.O. Box 17999, Jackson, MS 39217; (601) 979-2485 as early as possible in the term.)

**Diversity Statement**

(Jackson State University is committed to creating a community that affirms and welcomes persons from diverse backgrounds and experiences and supports the realization of their human potential. We recognize that there are differences among groups of people and individuals based on ethnicity, race, socioeconomic status, gender, exceptionalities, language, religion, sexual orientation, and geographical area. All persons are encouraged to respect the individual differences of others.)

**Caveat (if needed)**

* Not allow students come/go, Not allow students to use cell-phone after class starts.
* Not allow to bring any type of food into class.
* No make-up tests will be given, except in cases of verifiable emergencies.
* All assignments must be turned in at the beginning of class on the day due.

**Class Attendance Policy**

# Students at Jackson State University must fully commit themselves to their program of study. One hundred percent (100%) punctual class attendance is expected from each student for all the scheduled classes and activities. Instructors keep attendance records and any absence for which a student does not provide written official excuse is counted as an unexcused absence. With or without official excuses, students are responsible for the work required during their absences.

**Academic Honesty Statement**

* Assignments must be done individually; you may not work in groups. You may not copy another person's work in any manner (electronically or otherwise). Furthermore, you must not give a copy of your work to another person. We will be randomly checking for similarities between programs, and you may be asked to present and explain your program to the instructor.
* Cheating will not be tolerated. Students guilty of cheating on a test or program will be given an F in the course. Remember that allowing others to copy your work is considered cheating.